Geographic Panel Review 2 - Sacramento River/Butte Basin

Proposal number: 2001-K202 **Short Proposal Title:** Delta Rearing by Central Valley

Chinook

- 1. Applicability to CALFED ERP Goals and Implementation Plan and CVPIA priorities and relevance to ERP and CVPIA priorities in your region. This project addresses a scientific uncertainty crucial to the CVPIA and CALFED goal of maintaining and enhancing salmon populations. It is project-wide in scope but relevant to all regions since all juvenile chinook must pass through the delta and thus have the potential to do some or most of their rearing there. Locally, DFG crews have reported that up to 90% of Butte Creek juvenile spring run migrate down as fry. We all hope they find some place to rear and the delta seems a potential candidate. The otolith analysis technique, if perfected, could provide immensely valuable data for identifying critical salmon habitat in areas other than the delta. For example, we know that juvenile salmon rear in non-natal tributaries, but we presently have no way to determine if such behavior increases or decreases their chances of survival to return as adults.
- **2.** Linkages/coordination with previously funded projects or other restoration activities in your region. While there are no direct links, the project links indirectly with all projects designed to improve juvenile rearing habitat in that it provides a mechanism for testing their effectiveness. A pilot study has demonstrated that otolith analysis provides an appropriate tool for addressing salmon life-history questions.
- 3. Feasibility, especially the project's ability to move forward in a timely and successful manner. The pilot study indicates feasibility, but see TARP comments questioning feasibility.
- **4.** Qualifications of the applicants and others involved in implementing the proposed project. The research team is qualified.
- **5.** Local involvement (including environmental compliance). Local entities will be involved in collecting specimens. Take permits may be a problem for listed species.
- **6. Cost.** Reasonable
- **7. Cost sharing.** The CDFG will provide \$150,000 (22% of project cost).
- **8.** Additional comments. More than 3-year funding is needed to maximize project success. With 7 years of funding, otoliths of returning adults can be compared with otoliths of juveniles of the same cohort collected from known rearing areas. To complete the project in three years, the assumption has to be made that rearing conditions are the same from year to year in the same habitat. Different water years could completely invalidate that assumption. Panel also concerned that the tool is not fully developed, but if fully developed, could be a valuable tool.

Regional Ranking

Panel Ranking: Medium

Provide a brief explanation of your ranking. Concur with TARP that some aspects of the proposal need better justification. This could be a valuable tool if it proves to work out, but at present the Panel isn't sure it will work.